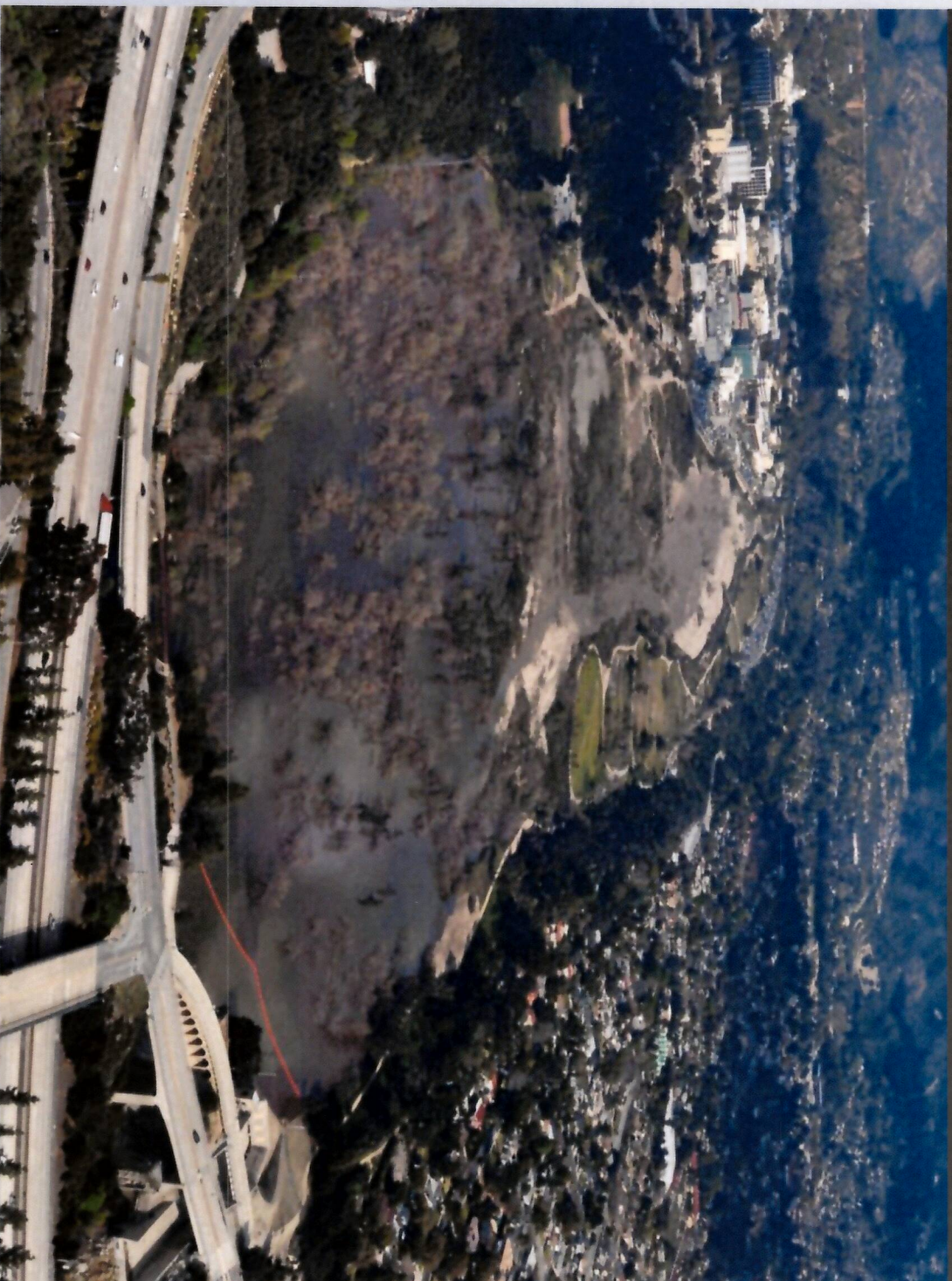




Devil's Gate Reservoir Sediment Removal and Management Project

2011 Aerial View



Alternative 3, Configuration D, Option 2



LACFCD Easement:
258 Acres

Originally Proposed
Project: 120 Acres

Recommended
Project (Alt 3,
Configuration D,
Option 2):

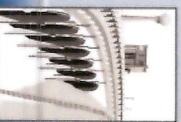
Sediment Removal
71 Acres

Sediment
Management
52 Acres



Traffic – Alternative 5 Haul Routes

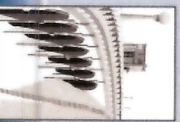
- Adds additional haul routes to access the reservoir from the 210 Freeway
- Developed with traffic engineers from Cities of La Cañada Flintridge and Pasadena to reduce impacts
- Can Avoid impact at Berkshire Place/La Cañada High School with alternate route in AM
- Enables flexibility to balance traffic between Cities of La Cañada Flintridge and Pasadena





Air Quality Mitigation

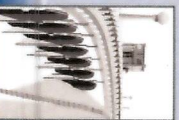
- In Draft EIR Air Quality Impacts were found to be significant
- **MM AQ-1:** LACFCD shall require all construction contractors to use ***only*** sediment removal dump trucks that meet EPA's emission standards for Model Year 2007, or newer.
- Air Quality impacts now less than significant





Recommended Alternative

- Based on reduction in level of impacts while achieving project objectives, LACFCD recommends:
 - Alternative 3 Configuration D, Option 2
 - With addition of the haul routes from Alternative 5, Haul Route Alternative



Devil's Gate Reservoir Sediment Removal Comparison

Item	Proposed Project	Working Group Recommendations	Recommended Alternative
Sediment Capacity of Devil's Gate Reservoir	4M Cubic Yards	2.5M Cubic Yards	3.7M Cubic Yards
Excavation Amount to Reach Capacity	2.8M Cubic Yards	1.1M Cubic Yards	2.4M Cubic Yards
Project Duration	5 Years	5 years	3 - 5 Years
Maximum Amount to Remove Per Year	1.2 M Cubic Yards ¹	220,000 Cubic Yards	800,000 Cubic Yards
Additional Amount Per Year After Heavy Inflow	0 Cubic Yards	100,00 Cubic Yards	0 Cubic Yards
Preferred Reservoir Configuration	N/A	Alt. 3 Configuration D	Alt. 3, Config. D, Option 2 ⁷
Westside Stream	N/A	Remove from Alternative	Mimics Hahamonga Master Plan
Seasonal Pool	None	Recommended	Occasionally possible
Project Footprint	120 Acres	71 Acres	71 Acres
Maintenance Footprint	92 Acres	< 50 acres	52 Acres
Scheduled work days	M-Sat Non Storm Season only	M-F	M-F Non-Storm Season Only ⁵
Scheduled work hours per day	7 am - 7 pm	8 am - 4 pm	7 am - 3:30 pm ⁶
Scheduled trucking hours	7 am - 7 pm	8:45 am - 2:45 pm	7 am - 3:30 pm ² No staging of trucks on City streets
Maximum Truck Round Trips per Day	425	120	400
Air Quality	Tier 3 offroad/ 2007 if available	Low Emissions/highest standards	Low Emission required Tier 3 offroad/ 2007 or better
Dust Control	BMP's, water trucks, covered trucks	Same and adding slower production	BMP's, water trucks, covered trucks ³
Habitat Mitigation	Proposed 1:1	5:1 in Arroyo Seco or Pasadena	Will Implement Hahamonga MP ⁴
Daily Contact during construction	Inspector available on-site and phone number provided	On-Site Project Manager number	Inspector available at on-site trailer and phone number provided. 24 hour Dispatch phone number provided
A Larger Vision	Purely Flood Control	Hahamonga MP + downstream restoration	Follows Hahamonga MP

1- If achieved, project length would be shortened to less than 3 years.

2- Routes altered to reduce impacts and maintain productivity.

3- No significant impacts per EIR.

4- Minimum 1:1 plus additional mitigation as required by regulatory permits.

5- Sediment removal occurs during non-storm season (April 15 to October 15 or until significant rainfall occurs).

6- Limited activities within reservoir outside these hours

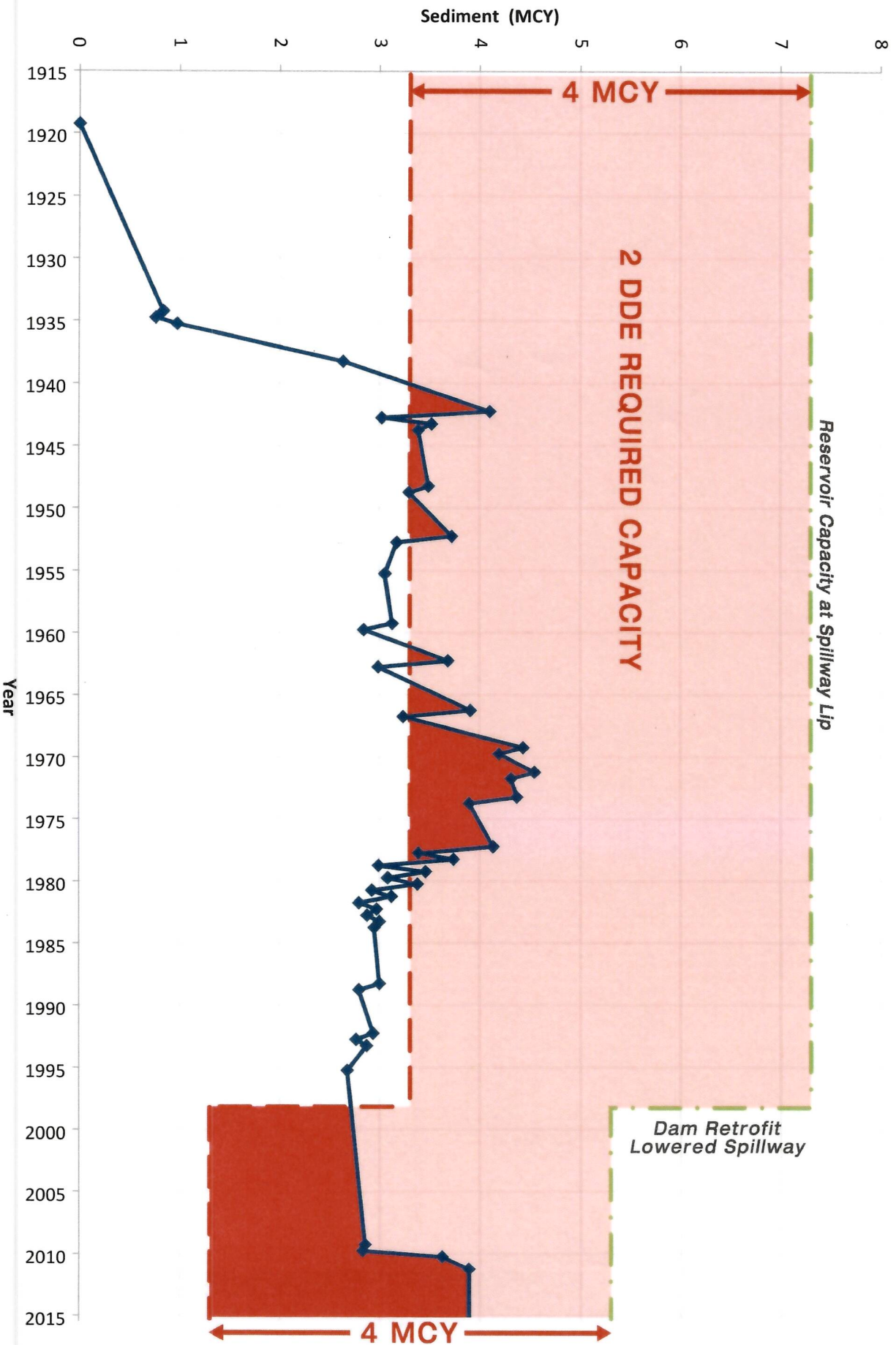
7- Option 2 removes westside leg from the project footprint area.

Historic Sediment Events

- 1934 to 1943 = 4.7 Million Cubic Yards
 - 1934-1938 = 1.0 MCY after small fire
 - 1938 storm (50 yr. storm) = 1.7 MCY
 - 1941 = 1.5 MCY during 2 large storms
 - 1943 = 0.5 MCY
- 1966 to 1969 = 2.0 Million Cubic Yards
 - 1966 = 0.9 MCY
 - 1969 = 1.1 Million CY (appx. 50 yr. storm- no fires)
- 2010-2011 = 1.3 Million Cubic Yards
 - 2010 = 0.9 MCY in approximately 5 yr. storm
 - 2011 = 0.4 MCY in less than 5 yr. storm

Graph of Historical Sediment Storage at Devil's Gate Reservoir

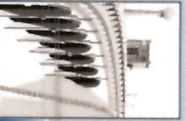
—■— Sediment in Storage ■ Reservoir Does Not Meet 2 DDEs - - - 2 DDE Required Capacity



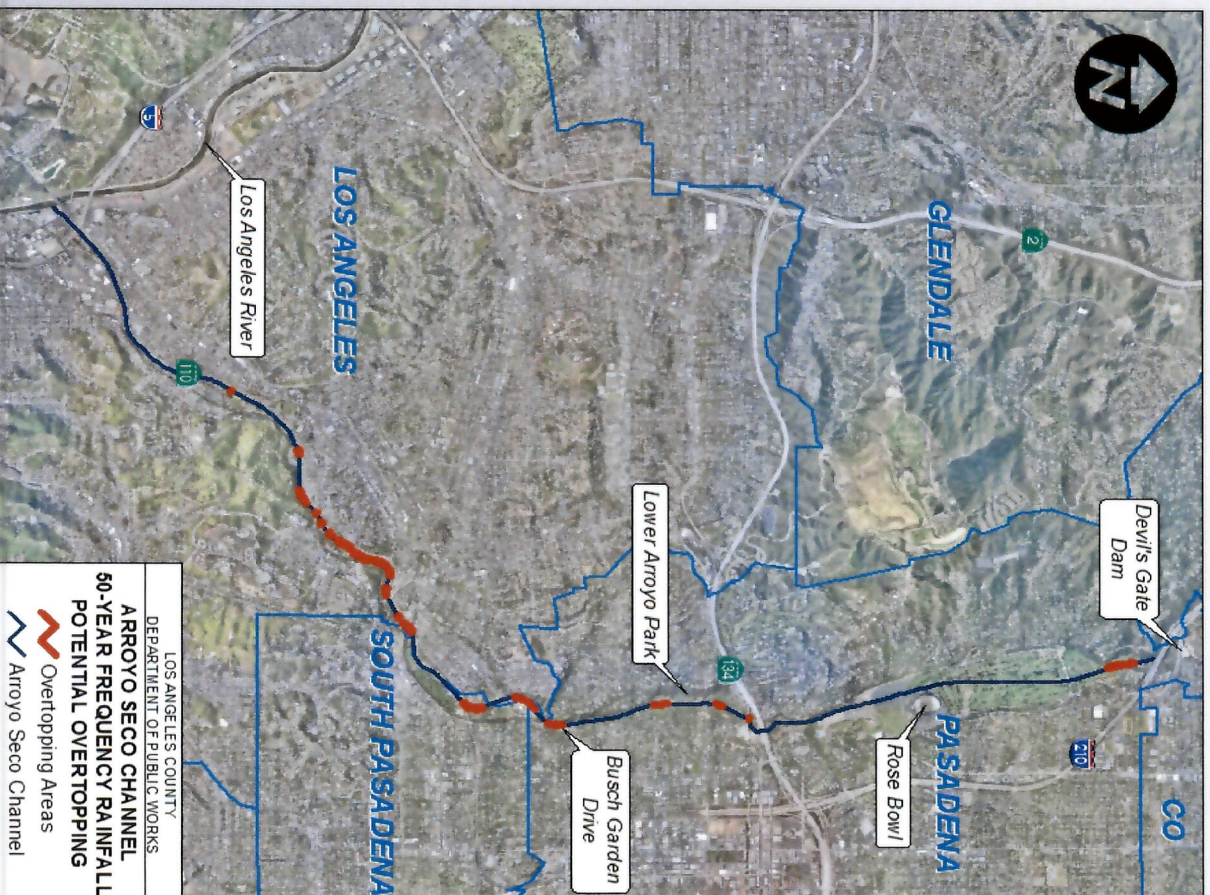
Devil's Gate Reservoir Sediment Removal and Management Project



End of Presentation



Downstream Communities



Traffic – Alternative 5 Haul Routes

